

LOGGED BY S. McLandrich	BEGIN DATE 12-26-07	COMPLETION DATE 12-26-07	BOREHOLE LOCATION (Lat/Long or North/East and Datum) N2120815.566 / E5997656.382 (NAD83)	HOLE ID DSB-R6
DRILLING CONTRACTOR Gregg Drilling and Testing, Inc.	BOREHOLE LOCATION (Offset, Station, Line) Offset 46ft L Sta 49+41 SB Alignment		SURFACE ELEVATION 10.546 ft (NAVD88)	
DRILLING METHOD Mud Rotary	DRILL RIG Failing 1500		BOREHOLE DIAMETER 5 in.	
SAMPLER TYPE(S) AND SIZE(S) (ID) MC (2.4"), SPT (1.4"), Shelby (2.87"), Pitcher (2.87")	SPT HAMMER TYPE Automatic, 140 lbs., 30-inch drop		HAMMER EFFICIENCY, ERI 72.8%	
BOREHOLE BACKFILL AND COMPLETION Neat Cement Grout backfill	GROUNDWATER DURING DRILLING AFTER DRILLING (DATE) READINGS		TOTAL DEPTH OF BORING 99 ft	

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
0	0		CLAYEY GRAVEL (GC), dark brown, moist, GRAVEL is fine to coarse, angular, with SAND. [FILL]												
8.55	2														
	3		SANDY lean CLAY (CL), dark olive gray, moist, SAND is fine to medium.		S1	8	12	100							
6.55	4		CLAYEY SAND with GRAVEL (SC), loose, dark brown and brown, mottled, fine, GRAVEL is fine, subangular, organic/earthy odor.		S2	0	0	100							
	5		Lean CLAY with SAND (CL), soft, dark greenish gray and dark gray, very moist, SAND is fine, mottled.			0									
4.55	6		Fat CLAY with SAND (CH), bluish gray. [SANDY BAY MUD]												
	7														
2.55	8				U3		0	0							
	9														
0.55	10														
	11														
-1.45	12		Grades sandy.												
	13				S4	0	0	100							
-3.45	14		CLAYEY SAND (SC), dark bluish gray, moist, SAND is fine, with lenses of fat CLAY. [MARINE SAND]			0									
	15		13.5', grades with fewer CLAY lenses.		S5	0	11	100							
-5.45	16		Poorly graded SAND with CLAY (SP-SC), medium dense, dark bluish gray, very moist, fine, with occasional fat CLAY lenses.			2									
	17														
-7.45	18		Poorly graded SAND (SP), medium dense, dark bluish gray, very moist, fine, occasional fat CLAY lenses.		S6	12	35	100							
	19		Grades wet.			22									
-9.45	20		Dark gray Fat CLAY with SAND (CH), soft to very soft, dark gray, very moist to wet, SAND is fine. [SANDY BAY MUD]		S7	0	4	100							
	21					1									
-11.45	22					3									
	23		Poorly graded SAND (SP), medium dense, yellowish brown, wet, fine to medium, with trace fines. [COLMA SAND]		S8	11	50	100							
-13.45	24					24									
	25				S9	26	11	100							

(continued)



Department of Transportation
Division of Engineering Services
Geotechnical Services

REPORT TITLE
BORING RECORD

DIST. 4 COUNTY S.F. ROUTE 101 POSTMILE 8.3/9.4

HOLE ID
DSB-R6

EA
163701

PROJECT OR BRIDGE NAME
Doyle Drive Replacement Project

BRIDGE NUMBER 34-164L PREPARED BY T. Carroll

DATE
11-3-08

SHEET
1 of 4

Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
-15.45	25		Poorly graded SAND with CLAY (SP-SC), medium dense, dark gray, wet, fine.			2									
	26		Poorly graded SAND (SP), medium dense, dark gray, wet, fine, trace fines.			4									
	27					7									
-17.45	28		Grades dark yellowish brown, very dense, trace fines.		S10	17	50/6"	100							
	29				S11	13	63	100							
	30					27									
	31					36									
-19.45	32														
	33				S12	28	50/6"	100							
	34				S13	19	61	100							
	35					29									
	36					32									
-21.45	37														
	38				S14	21	50/6"	100							
	39				S15	18	58	100							
	40		39.5', grades with occasional iron-oxide stained streaks.			25									
	41					33									
-23.45	42														
	43				S16	33	50/5.5"	100							
	44				S17	15	55	100							
	45					25									
	46					30									
-25.45	47														
	48				S18	30	50/5.5"	100							
	49				S19	20	64	100							
	50		49.0', grades with heavily iron-oxidized and slightly cemented lenses.			30									
	51					34									
-27.45	52														
	53		Poorly graded SAND with SILT (SP-SM), dense, yellowish brown, moist, fine.		S20	13	47	100							
	54					20									
	55					27									

(continued)



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Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 in	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
-45.45	56		Poorly graded SAND (SP), dense, yellowish brown, moist, fine.												
-47.45	58		Poorly graded SAND with CLAY (SP-SC), dense, dark gray, wet, SAND is fine, with black specks, with shell fragments up to 1/16" diameter.	X	S21	12 15 15	30	100							
-49.45	60														
-51.45	62		Grades with increased CLAY content.												
-53.45	64			X	S22	15 23 28	51	100							
-55.45	66														
-57.45	68		Lean CLAY (CL), hard, olive gray, damp to dry, with trace SAND. [OLD BAY CLAY]	X	S23	12 20 22	42	100				PP = 2.0			
-59.45	70														
-61.45	72														
-63.45	74		SANDY CLAY (CL), very stiff, orangish brown, moist, with reddish brown GRAVEL, with pockets of olive gray lean CLAY with trace fine SAND, fine SAND grades medium stiff. [ALLUVIUM]	X	S24	21 50/6"	50/6"	100							
-65.45	76														
-67.45	78		Grades bluish gray with vertical reddish brown vein, with 1/8" diameter calcite nodules.	X	S25	10 15 27	42	100							
-69.45	80														
-71.45	82														
-73.45	84		Grades with pockets of gray CLAYEY SAND, light gray CLAY streaks, frequent nodules (up to 1/4" diameter) of oxidation, trace fine GRAVEL (GRAVEL is subrounded).	X	S26	18 25 35	60	100							
	85														

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-75.45	86		SANDY CLAY (CL), very stiff, orangish brown, moist, with reddish brown GRAVEL, with pockets of olive gray lean CLAY with trace fine SAND, fine SAND grades medium stiff. [ALLUVIUM]												
-77.45	88		Grades without oxidized nodules, with black carbon veins (up to 1/16" diameter)	X	S27	14 26 31	57	100							
-81.45	92		SEDIMENTARY ROCK (Siltstone and Sandstone), yellowish brown and reddish brown, very intensely weathered, moderately hard, with soft CLAY infilling, heavy iron-oxide staining on fracture planes. [BEDROCK]	X	S28	50/5.5"	50/5.5"	100							
-87.45	98				U29		350 psi to 400 psi	100							
-89.45	100		Borehole terminated at a depth of 99 feet on 12/26/2007.												
-91.45	102		See Boring Record Legend for soil classification chart and key to test data and sampler type.												
-93.45	104														
-95.45	106														
-97.45	108														
-99.45	110														
-101.45	112														
-103.45	114														
	115														



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